The relative merits of VATS lobectomy vs lobectomy accomplished through muscle sparing or standard posterolateral thoracotomy with regard to postoperative morbidity, length of hospital stay, and return to preoperative activity have been discussed by Yim et al and other investigators.3-5 Yim and colleagues also describe the anatomic and technical limitations preventing the use of VATS lobectomy at this time. Accordingly it does appear that lobectomy can be safely accomplished under total video-assisted guidance by experienced thoracic surgeons without compromise of patients’ safety or of the primary oncologic principles important in the management of malignant intrathoracic lesions.

Furthermore, postoperative morbidity appears to be reduced in most circumstances when well-trained individuals use the VATS lobectomy approach.

We congratulate Yim et al for genuine and concise reporting of their experience with the VATS approach to pulmonary lobectomy. In accordance with their conclusions, we recommend the VATS lobectomy approach for small to moderate-sized tumors (less than 4 cm in diameter) confined to the lobe of the lung without evidence of endobronchial extension of the tumor. Of course, a careful intraoperative hilar and mediastinal nodal staging equivalent to that customarily performed during open lobectomy procedures should accompany VATS lobectomy when performed for carcinoma of the lung. VATS lobectomy is also a reasonable approach to benign pulmonary conditions requiring lobectomy (ie, localized bronchiectasis) when the hilar dissection is not compromised by intense inflammation or extensive adenopathy. There is no substitute for experience and mature surgical judgment when attempting VATS lobectomy for either benign or malignant pulmonary conditions, and accordingly, the surgeon should not hesitate to convert to an “open” thoracotomy approach if there is any question of compromising the safety or therapeutic goals of the proposed pulmonary resection.

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REFERENCES

Video-Assisted Thoracoscopy

Treatment for Empyema and Hemothorax

Although the surgical treatment of acute thoracic empyema has existed since the days of Hippocrates,1 and the importance of closed drainage in cases in which the lung would collapse if exposed to atmospheric pressure appreciated since World War I,2 the appropriate treatment of thoracic empyema is not always clear. Some authors3-4 advocate frequent early open drainage while others5 are proponents of closed drainage in the great majority of cases. Some authors even go so far as to state that, “open drainage plays no role in the therapy of acute empyema.”6 Prior advocates of early decortication7 have had their position bolstered by the development of thoracoscopic procedures, video-assisted or otherwise.8-10 To confuse matters further, nonsurgical methods of treatment, including the use of radiologic-guided catheters11,12 and the use of streptokinase or urokinase, have their strong advocates.13,14 Thus, the treatment of acute empyema is still unsettled. The article by Landreneau and colleagues in this issue of CHEST (see page 18) is part of the evolution of the thoracoscopic treatment of acute empyema.

Whatever the method, the aims of treatment of empyema are clear. They are to cure the infection by promoting pleural apposition, to maintain maximum pulmonary function, and to do this in a way which is the safest, most comfortable and convenient for the patient, and the least expensive. A tall order indeed.

Part of the problem is, of course, encased in definition. Different authors define empyema in different ways. Thick pus is obvious to surgeons and pulmonologists alike. Defining empyema on the basis of changes in glucose or lactic dehydrogenase values15,16 complicates comparisons of methods of treatment. Further, the phase of development of the empyema whether in the exudative, fibrinopurulent, or organizing phase as defined by the American Thoracic Society17 clearly will affect the results.

Landreneau and colleagues did define empyemas as those with frankly purulent fluid and as complex when standard chest x-ray films or computed tomography identified multiloculated fluid collections. As the authors noted, 49 of the 50 patients with complex em...
pyemas in the fibrinopurulent phase were successfully managed by video-assisted thoracic surgery (VATS) intervention alone.

Operation in patients where the empyema is in the chronic organizing phase is less successful. As the authors point out, the use of VATS during the organizing phase requires great judgement and early consideration of conversion to an open procedure.

In summary, the best treatment of apparent simple problems such as acute thoracic empyema is not always so simple. The authors' advocacy of an early video-assisted approach is reasonable. The obvious plea for prospective randomized studies should be made, but the organizational aspects of such a study probably preclude its application. For the time being, I believe evolution toward the earlier use of videoassisted surgical intervention is an appropriate approach for most patients who do not respond to simpler methods of treatment of acute thoracic empyema.

Finally, the authors' advocacy of VATS for treatment of significant retained hemothoraces is not addressed in these comments. This is a different problem, and perhaps, should be considered for a separate communication.

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REFERENCES

Cardiac Rehabilitation in Obese Patients

The days during which cardiac rehabilitation is perceived solely as exercise rehabilitation for patients disabled from a myocardial infarction or recent coronary artery bypass surgery are quickly waning. As we approach the next millennium, the field of cardiac rehabilitation has evolved to become part of broad-based preventive services, which focus on cardiovascular risk reduction (or risk treatment) combining prescriptive exercise with coronary risk factor modification in patients with established heart disease. As such, the American Heart Association recognizes cardiac rehabilitation services as standard care, which should be integrated into the overall treatment plan for patients with coronary artery disease.1 Furthermore, recently published guidelines from the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)2 and the forthcoming federal guidelines from the Agency of Health Care Policy and Research (AHCPR) place major emphasis on comprehensive risk reduction efforts in cardiac rehabilitation.

Obesity has been determined to be an important risk factor for cardiovascular disease among men and women,3 although specific data on racial/ethnic minorities are lacking. Obesity appears to interact with or amplify the effects of other risk factors by mechanisms that, as yet, remain frontiers for further research. Sobering data from the National Health and Nutrition Exam Surveys show that the prevalence of obesity among Americans has increased over the past 20 years, such that an estimated 47 million adult Americans are deemed to be overweight. Thus, obesity should be viewed as a prevalent, serious, and to date, refractory public health problem.4

Of the more than 30 published scientific studies that focus on weight loss outcomes after cardiac rehabilitation, none have specifically targeted overweight patients nor reported results relative to the degree of obesity at baseline. In this issue of CHEST (see page 109/1/1, January 1996, Vol 109, No 1, pages 3-10) Dr. James W. Mackenzie, MD, FCCP, New Brunswick, New Jersey, addresses the important issue of obesity in the era of cardiac rehabilitation.